

WHAT IS CLAIMED IS:

1. A method for resolving switch number conflicts in a stackable switch system comprising:

communicating a message from a first switch in the
5 stackable switch system to a second switch in a stackable switch system;

determining, based on the communicated message, that the first switch in the stackable switch system has the same switch number as the second switch in the stackable
10 switch system; and

in response to the determination that the first and second switches have the same switch number, determining whether the first switch should keep the switch number or select a new switch number.

15

2. The method of Claim 1, wherein the message includes a switch number for the first switch and a unique identifier for the first switch, and wherein the determination of whether the first switch should keep the
20 switch number or select a new switch number is based in part on the unique identifier.

3. The method of Claim 1, wherein communicating a message from a first switch in the stackable switch
25 system to a second switch in a stackable switch system comprises communicating the message through a plurality of additional switches in the stackable switch system disposed between the first and second switches.

30 4. The method of Claim 1, and further comprising changing, by the first switch, the switch number of the first switch.

5. The method of Claim 1, and further comprising changing, by the second switch, the switch number of the second switch.

5

6. The method of Claim 1, wherein determining whether the first switch should keep the switch number or select a new switch number is based on a least one of the criteria selected from the group consisting of a
10 predetermined priority for the switch, how long the switch has been running, a unique identifier for the switch, and whether the switch is utilizing a default configuration.

15 7. The method of Claim 6, wherein the unique identifier is a MAC address.

8. The method of Claim 1, wherein determining whether the first switch should keep the switch number or
20 select a new switch number is based the following rules, in order:

- (a) the switch that is a master wins;
- (b) the switch having a greater user configurable priority wins;
- 25 (c) the switch that is not using a default configuration wins;
- (d) the switch that has the higher feature priority wins;
- (e) the switch that has the longest uptime wins;
- 30 and
- (f) the switch that has the lowest MAC address wins.

9. The method of Claim 1, and further comprising selecting, as a new switch number for the first switch, the lowest available switch number.

5

10. The method of Claim 1, and further comprising communicating the selected new switch number to the second switch.

11. A stackable switch system comprising:

a plurality of switches each connected to at least one other switch in the stackable switch system, each switch comprising a stack manager operable to:

5 receive a communication from a second switch in the in the stackable switch system;

 determine, based on the communicated message, that the switch in the stackable switch system has the same switch number as the second switch; and

10 in response to the determination that the switch and the second have the same switch number, determine whether the switch should keep the switch number or select a new switch number.

15 12. The system of Claim 11, wherein the message includes a switch number for the switch and a unique identifier for the switch, and wherein the switch is further operable to determine whether the switch should keep the switch number or select a new switch number
20 based in part on the unique identifier.

 13. The system of Claim 11, wherein the switch is operable to receive the communication from a second switch through at least one other switch in the stackable
25 switch system.

 14. The system of Claim 11, wherein the switch is further operable to change its switch number.

15 15. The system of Claim 11, wherein the switch is further operable to determine whether the switch should keep the switch number or select a new switch number is based on a least one of the criteria selected from the group consisting of a predetermined priority for the switch, how long the switch has been running, a unique identifier for the switch, and whether the switch is utilizing a default configuration.

10 16. The system of Claim 15, wherein the unique identifier is a MAC address.

15 17. The system of Claim 11, wherein the switch is operable to determine whether the switch should keep the switch number or select a new switch number based the following rules, in order:

- 20 (a) the switch that is a master wins;
- (b) the switch having a greater user configurable priority wins;
- (c) the switch that is not using a default configuration wins;
- (d) the switch that has the higher feature priority wins;
- (e) the switch that has the longest uptime wins;
- 25 and
- (f) the switch that has the lowest MAC address wins.

30 18. The method of Claim 11, wherein the switch is operable to select, as a new switch number, the lowest available switch number.

19. The system of Claim 11, wherein the switch is further operable to communicate a selected new switch number to the second switch.

20. An Ethernet switch for use in a stackable switch system and for resolving switch number conflicts in the stackable switch system, the switch comprising a computer-readable medium storing a computer program that,
5 when executed, is operable to:

receive a communication from a second switch in the in the stackable switch system;

determine, based on the communicated message, that the switch in the stackable switch system has the same
10 switch number as the second switch; and

in response to the determination that the switch and the second have the same switch number, determine whether the switch should keep the switch number or select a new switch number.

15

21. The Ethernet switch of Claim 20, wherein the message includes a switch number for the switch and a unique identifier for the switch, and wherein the program is further operable to determine whether the switch
20 should keep the switch number or select a new switch number based in part on the unique identifier.

22. The Ethernet switch of Claim 20, wherein the program is operable to receive the communication from a
25 second switch through at least one other switch in the stackable switch system.

23. The system of Claim 20, wherein the switch is further operable to change its switch number.

30

24. The system of Claim 20, wherein the program is further operable to determine whether the switch should keep the switch number or select a new switch number is based on a least one of the criteria selected from the group consisting of a predetermined priority for the switch, how long the switch has been running, a unique identifier for the switch, and whether the switch is utilizing a default configuration.

25. The switch of Claim 20, wherein the unique identifier is a MAC address.

26. The system of Claim 20, wherein the program is further operable to determine whether the switch should keep the switch number or select a new switch number based the following rules, in order:

- (a) the switch that is a master wins;
- (b) the switch having a greater user configurable priority wins;
- (c) the switch that is not using a default configuration wins;
- (d) the switch that has the higher feature priority wins;
- (e) the switch that has the longest uptime wins;
- and
- (f) the switch that has the lowest MAC address wins.

27. The method of Claim 20, wherein the program is operable to select, as a new switch number, the lowest available switch number.

28. The system of Claim 20, wherein the program is further operable to communicate a selected new switch number to a second switch in the stackable switch system.

29. A system for resolving switch number conflicts in a stackable switch system comprising:

means for communicating a message from a first switch in the stackable switch system to a second switch
5 in a stackable switch system;

means for determining, based on the communicated message, that the first switch in the stackable switch system has the same switch number as the second switch in the stackable switch system; and

10 means in response to the determination means, for determining whether the first switch should keep the switch number or select a new switch number.